UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION 7
25 FUNSTON ROAD
KANSAS CITY KANSAS 66115

October 2, 1984

MEMORANDUM

SUBJECT Preliminary Assessment of St Louis Ordnance Plant
St Louis, Missouri

FROM. Paul E. Doherty, Chief
Site Investigation Section, EP&R/ENSV

TO Robert L. Morby
Chief, WMBR/ARWM

THRU William J Keffer
Chief, EP&R/ENSV

John C Wicklund
Director, ENSV

David A Wagoner
Director, ARWM

Attached for your review us a preliminary assessment of the above referenced facility.

We concur with the report's conclusions and recommendations

Attachment

2025658

Site St Louis Ordnance Plant
ID MO82100224645
Break 11 11

Preliminary Assessment
of
St Louis Ordnance Plant
St Louis, Missouri

TDD #R-07-8406-12
EPA ID# MO8210022465

September 26, 1984

Submitted to Paul E Doherty, ARPO
Prepared by Region VII REM/FIT
Task Leader Mark R Mayo

TABLE OF CONTENTS

		Page
SECTION 1	INTRODUCTION	1-1
SECTION 2	LOCATION OF THE SITE	2-1
SECTION 3	SITE DESCRIPTION	3-1
SECTION 4	SITE CONTACTS	4-1
SECTION 5	HISTORY OF SITE	5-1
SECTION 6	POTENTIAL ON-SITE WASTES	6-1
SECTION 7	MIGRATION POTENTIAL	7-1
SECTION 8	RECEPTORS	8-1
SECTION 9	CONCLUSIONS AND RECOMMENDATIONS	9-1
SECTION 10	REFERENCES	10-1
APPENDICES		
APPENDIX 1	TOPOGRAPHIC MAP	A-1
APPENDIX 2	PHOTOGRAPHS	A-2
APPENDIX 3	PAST OUTLEASE MAP	A-3
APPENDIX 4	CURRENT ACCESSED MAP	A-4
APPENDIX 5	CONTAMINANTS PRESENT	A-5
APPENDIX 6	PRELIMINARY ASSESSMENT FORM	A-6

SECTION 1 INTRODUCTION

The Ecology and Environment Inc Field Investigative Team (E&E/FIT) was tasked on June 3, 1984, under Technical Directive Document #R 07-8406-12 to perform a Preliminary Assessment of the St Louis Ordnance Plant, a potential hazardous waste site (EPA ID# MO8210022465) by the Region VII office of the U S Environmental Protection Agency (EPA) The purpose of this Preliminary Assessment is to establish the hazards potentially posed by this site and to make recommendations regarding further investigation A site visit was made on August 1, 1984 Present at the site visit was Emily Brown, U S Army Environmental Coordinator of the plant

SECTION 2 LOCATION OF THE SITE

The St Louis Ordnance Plant is located on 4300 Goodfellow Boulevard, off of Interstate Highway 70, in St Louis, Missouri The original 300 acre plant contained acreage in the SW 1/4 of Section 29, SE 1/4 of Section 30, NE 1/4 of Section 31, NW 1/4 of Section 32 of T 46N , R 3E (1) The coordinates of the approximate center are 38° 41' 18" N latitude and 90° 16' 36" W longitude (2) The plant is surrounded by residential, industrial, and commercial areas A map and a sketch of the site are included in the Appendix of this report

SECTION 3 SITE DESCRIPTION

During World War II, the St Louis Ordnance Plant covered 329 acres The plant has since been divided into smaller units operated by various city and government agencies Today, the St Louis Ordnance Plant is composed of about 25 acres Many of the original plant's buildings have been converted to satisfy new functions Other buildings were razed and new buildings constructed in their place

The present 25 acre St Louis Ordnance Plant is located within the confines of the Army Reserve Center The area is a maze of buildings and old magazines, connected by asphalt roads and concrete sidewalks The area containing the magazine and old explosive production buildings is fenced off and is off limits to employees and the public These 25 acres are located on a hill that overlooks the rest of the old plant area, which is located on level ground

SECTION 4 SITE CONTACTS

The St Louis Ordnance Plant is under control of the Commanding Officer at Fort Leonard-Wood, Missouri The contact at Fort Leonard-Wood is Dan Harrison, environmental coordinator, phone (314)-368-6108

The St Louis Ordnance Plant is in the process of being transferred to the Department of Labor, to be used for Job Corps. Walter Kuban is the contact at the Department of Labor office in St Louis, Missouri, phone number (314)-679-6204 Henry Bussey is the onsite Supervisor, 4300 Goodfellow Blvd , St Louis, Missouri 63120, phone number (314) 679-6289

Contact should be made with both Mr Harris and Mr Kuban to receive access permission Mr Bussey then must be notified to allow clearance at security gate

SECTION 5 HISTORY OF SITE

In January 1941, construction of St Louis Ordnance Plant commenced The plant was completed in May 1942 During World War II, the 329-acre facility was operated as a Government-owned, contractor-operated plant for the production of small arms ammunition (caliber 30 and 50) and components for 105mm shells (6)

Between the years of 1941 and 1959, different contractors operated different areas of the plant U S Cartridge Company, a subsidary of Olin Corporation, operated two areas consisting of about 200 acres for the production of small arms ammunition

McQuay-Norris Manufacturing Company operated 10 acres for the produced small ammunition cores Their area of production was located on the southeast corner of the Plant

Twenty-one acres located on the north side, east of Goodfellow Blvd , was removed from the Ordnance Plant to become the St Louis Army Ammo Plant (see TDD R-07-8407-30) This area was converted for the production of 105mm projectile casings Chevrolet Motor Division, General Motor Corporation, operated and maintained the Plant from 1944 to 1972 The plant was on line 1944-1945, 1951 to 1954, and 1966 to 1967 (7)

The area west of Goodfellow Boulevard was used for explosive production and storage In 1959 Hanley Industry, Inc , leased 28 acres of this area for receiving, loading, pressing, and testing of explosives Hanley operated at this site until 1979 The United States Army Reserve Center was formed south of the Hanley Area in 1960 The Reserve Center took over the land used by Hanley in 1979 Presently this area is being transferred to the Department of Labor to be used as a vocational training center under Job Corps

Since World War II, the land comprising the Ordnance Plant has been accessed to various city and federal government agencies Today only approximately 25 acres legally constitutes St Louis Ordnance Plant These acres are located in the U S Army Reserve Center Area The appendix provides a map of current agencies involved with areas occupied at the old plant

SECTION 6 POTENTIAL ON-SITE WASTES

The Hanley area presents the area of major concern and contamination It is the only area of the plant that produced explosives The other regions of the former plant have been decontaminated for their present functions This area of the plant was active much longer then the rest of the plant Explosive production occurred in the Hanley area during 1941-1945, and 1959 to 1979 Explosive residues and heavy metals have been found in samples taken inside buildings and magazines The explosives that were produced and used at the Hanley area were all nitrogenous compounds TNT, nitrocellulose, and nitroglycerin are major ingredients of many commercial explosives Cyclotrimethylenetrinitamine and pentaerythrite tetranitrate are the major compounds used in detonating cord, both being high explosives Lead styphnate is used in priming compositions that detonate explosive compounds

Cadmium, chromium, lead and mercury are heavy metals used in the explosive production process Lead and mercury are combined in explosive compounds Cadmium and chromium are used in catylitic processes to produce specific explosive compounds Appendix 5 provides a complete list of all contaminants present at the Hanley area

Sampling was performed in 1980 State-of-the-art

detection methodology were used for explosives This program included a cost effective mix of indicator sprays, thin layer chromatography analyses, and analysis of select samples by High Performance Liquid Chromatography (6) Heavy metals were sampled by wiping one square meter of surface area These swipe samples were analyzed for concentration of lead, chromium and cadmium by inductively coupled plasma spectroscopy (6) Mercury analyses were conducted using an atomic absorption spectrophotometer (1) Heavy metal and explosive analyses were initiated by Hanley as lease termination requirements Expected explosive and heavy metals contaminants are listed in Appendix 5 The results of the test found explosive residues in small but detectable levels Heavy metals, lead and chromium, were found in detectable limits in all the buildings surveyed

The contaminated Hanley area is fenced off and access by the public and Job Corp students is restricted Explosive residues and heavy metals are located mainly in buildings and magazine floors, wall tiles, and drains

SECTION 7 MIGRATION POTENTIAL

The major soil present within the boundaries of the old St Louis Ordnance Plant is classified as urban land The soil has a slope of 0 to 5% (7) This soil type is 85% covered by asphalt, buildings, and other impervious materials (1) Soil characteristics for the urban soil are unknown, due to disturbance of original soil characteristics by construction

Bedrock is located approximately 60 feet below ground surface and is comprised of St Genevieve limestone The area's major water supplying aquifer is located in a group of limestone formations This group includes the St Genevieve, St Louis, Salem, and Warsaw formation located below ground surface

Explosive waste produced at the Hanley area were transported to Fort Leonard-Wood, Missouri for disposal (6) Contaminants remaining are trace amounts located in former production areas Appendix 5 provides a complete list of all possible contaminants located on the Hanley area

The U S Army Reserve Center and Hanley area are located on an elevated area No controlled drainage exits and surface runoff is directed downhill to the north and east Runoff to the east is collected in a road ditch next to Goodfellow Boulevard Yearly net precipiation for St Louis is 0 inches (5) The 1-year 24 hour rainfall is 3 inches (6)

SECTION 8 RECEPTORS

The Hanley area is fenced off and access by the public and Job Corps students is restricted The plant is surrounded by industrial/commercial areas

The population on and around the site utilizes city supplied drinking water There are no wells onsite or close to the site

There are no sensitive environments or critical habitats of endangered species within one mile of the site

SECTION 9 CONCLUSIONS AND RECOMMENDATIONS

The original St Louis Ordnance Plant has been subdivided by different federal and local agencies since its operation during World War II The accessed areas were decontaminated as each agency takeover occurred This report concentrates on the 25 acres presently considered to be the St Louis Ordnance Plant including the Hanley area and the U S Army Reserve Center

Based on the U S Army survey (6), the Hanley area and U S Army Reserve Center pose little threat to the environment The explosive residues will be broken by bacteria, UV light, and air oxidation (6) Heavy metal migration is restricted because contamination is located in buildings and magazines The conclusions of this assessment based on background data gathered during this investigation does not conflict with the conclusions of the U S Army Soil samples could be taken in the ditch below the Hanley area to confirm that no off-site migration of contaminates has occurred

SECTION 10 REFERENCES

1 Soil Survey of St Louis County, Missouri, U S Department of Agriculture, Soil Conservation Service, 1979

2 Clayton Quadrangle, 7 5 Minute Series Topographic Map

3 Water Resources Report of St Louis Area, Missouri, U S Geological Survey, 1974

4 CERCLA Sec 103(c) Notification form received by the Region VII EPA from Olin Corporation on May 20, 1981

5 Uncontrolled Hazardous Waste Site Ranking System - Mitre Corporation, McLean, Virginia - August 1982

6 Survey of Hazardous/Chemical Area No 2 of former St Louis Ordnance Plant - U S Army Toxic and Hazardous Material Agency, Maryland - June 1981

7 Survey of St Louis Army Ammo Plant - U S Army Toxic and Hazardous Material Agency, Maryland

8 Explosive Data Guide - Explosive Research Institute - Arizona - 1977

APPENDICES

Appendix 1 Topographic Map

Appendix 2 Photographs

Appendix 3 Past Outlease Map

Appendix 4 Current Accessed Map

Appendix 5 Contaminants Present

Appendix 6 Preliminary Assessment Form

CLAYTON QUADRANGLE
MISSOURI
7 5 MINUTE SERIES (TOPOGRAPHIC)

SCALE 1 24 000

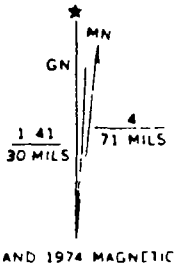
1 0 1 MILE

1000 0 1000 2000 3000 4000 5000 6000 7000 FEET

1 5 0 1 KILOMETER

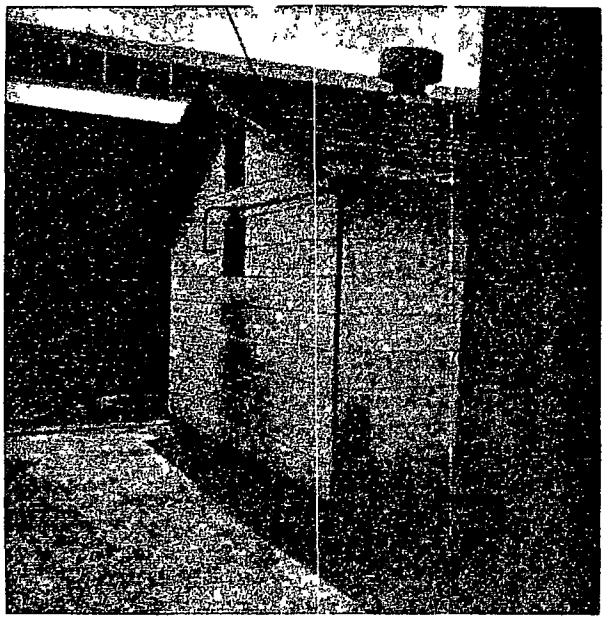
CONTOUR INTERVAL 10 FEET
NATIONAL GEODETIC VERTICAL DATUM OF 1929

Site Outlined



UTM GRID AND 1974 MAGNETIC NORTH
DECLINATION AT CENTER OF SHEET

QUADRANGLE LOCATION



Photographer
Mark Mayo

Witness
Jim Meier

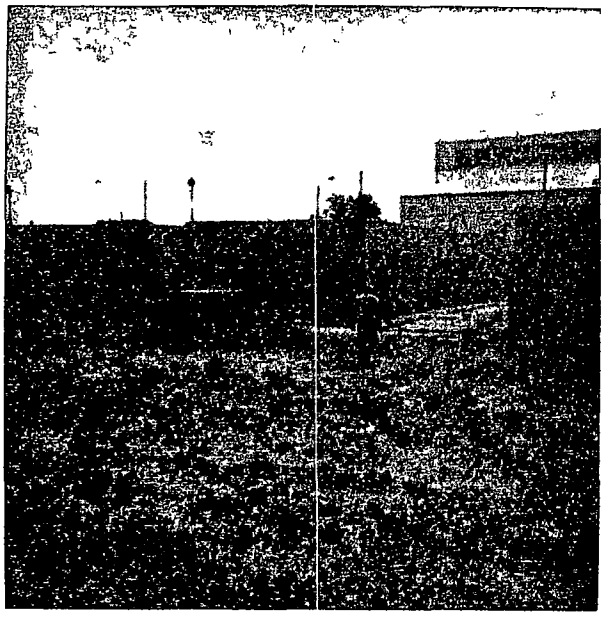
Date 8-1-84

Time 3 00

Direction SE

No 1 Subject Explosive Storage House

Facility St Louis Ordnance Plant



Photographer
Jim Meier

Witness
Mark Mayo

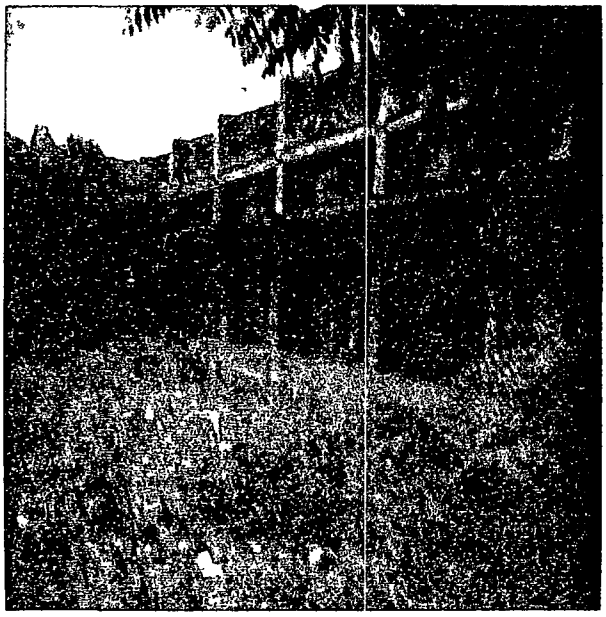
Date 8-1-84

Time 3.10

Direction SE

No 2 Subject Magazine Bunker surrounding explosive storage house

Facility St Louis Ordnance Plant



Photographer

Mark Mayo

Witness

Jim Meier

Date August 1, 1984

Time 3 15

Direction E

No 3 Subject Explosive Production Building

Facility St Louis Ordnance Plant

Photographer

Witness

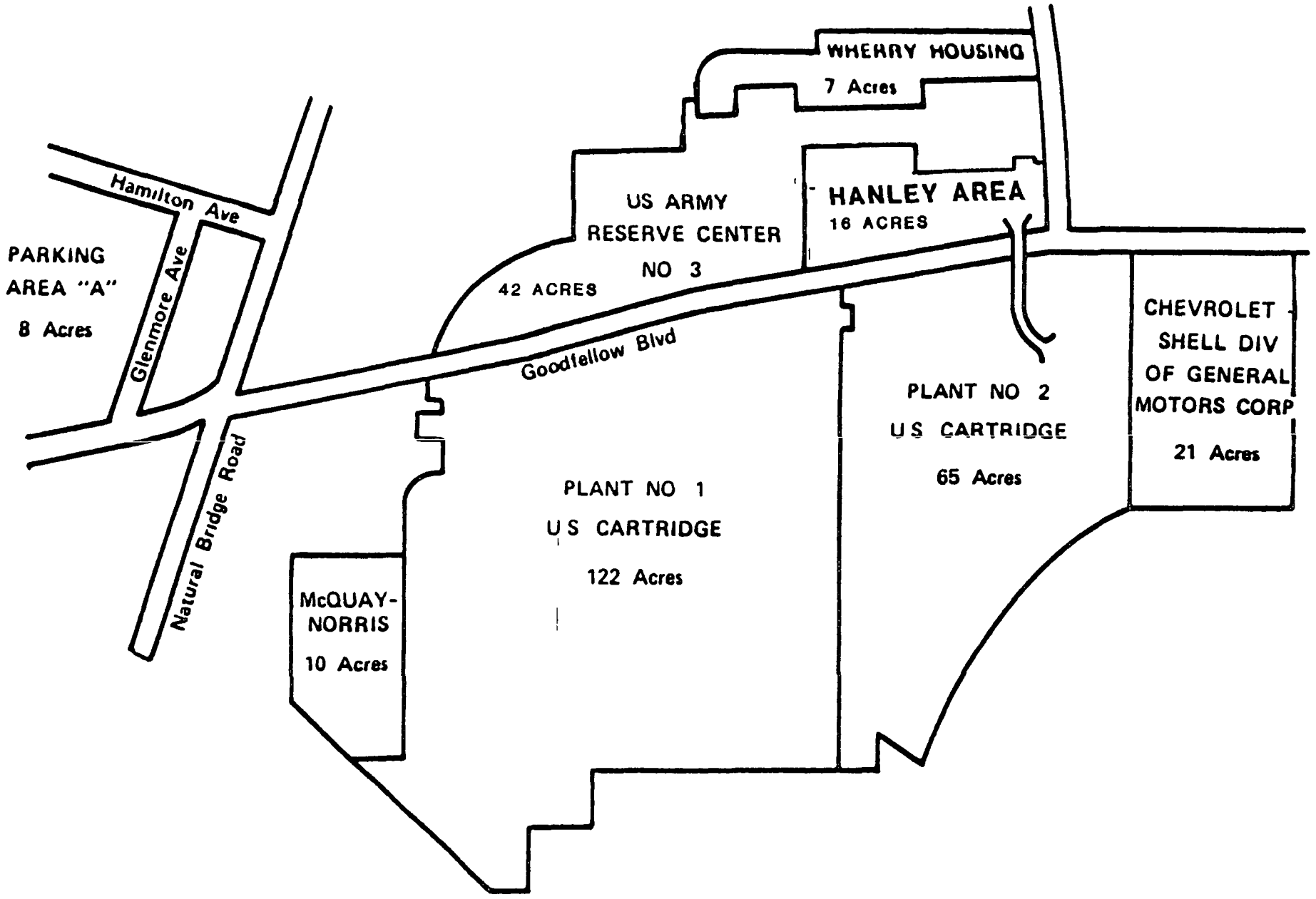
Date

Time

Direction

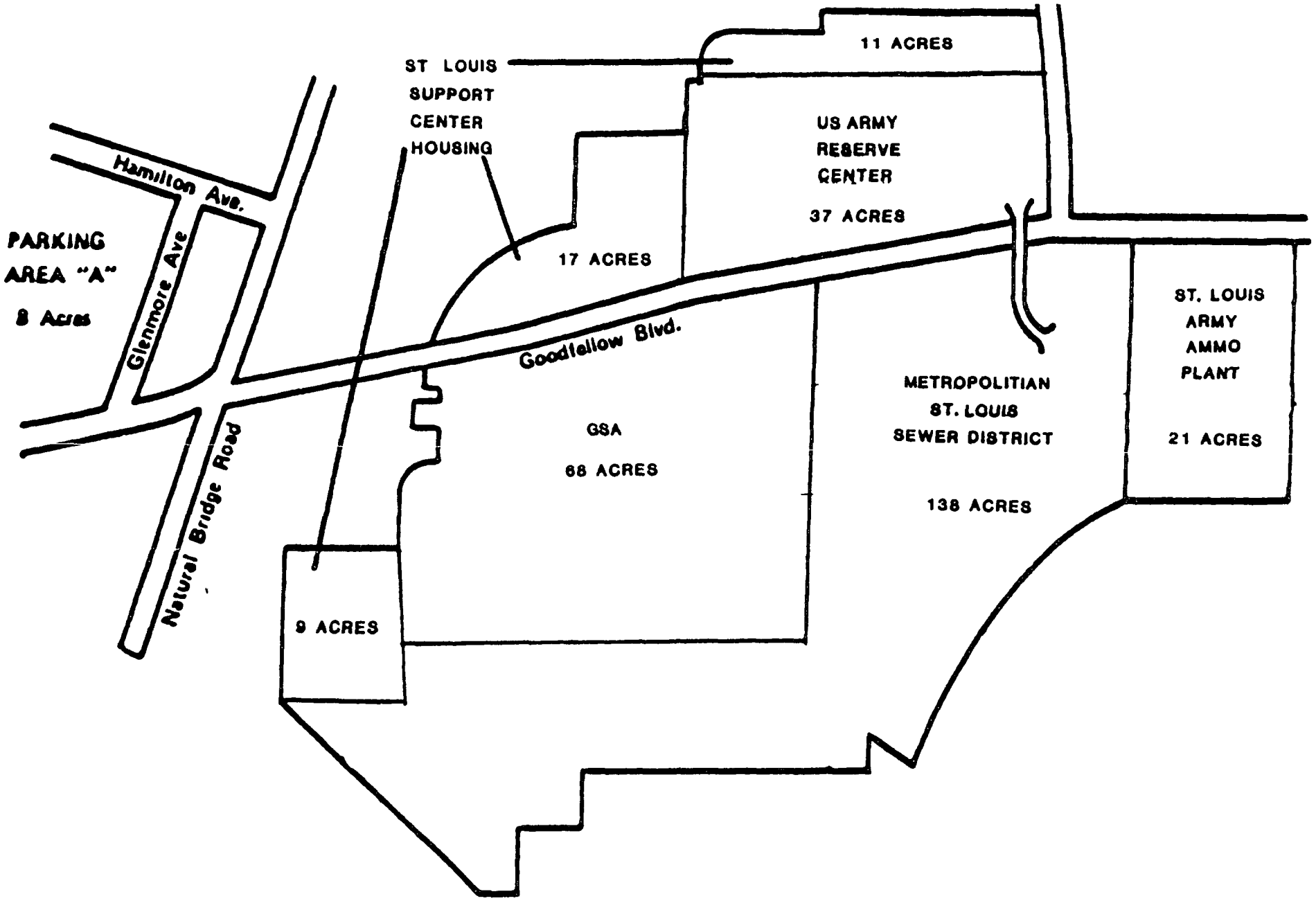
No Subject

Facility



Outlease map of St Louis Ordance Plant.

(Ref 6)



ACCESSED AREAS OF ST LOUIS ORDNANCE PLANT

(Ref 6)

Potential Contaminants

in the GUSARC Area, SLOP

2,4,6-Trinitroresorcinol (styphnic acid (TNR))

Cyclotrimethylenetrinitamine (RDX)

2,4,6-Trinitrotoluene (TNT)

Nitroglycerine (NG)

Pentaerythrite Tetranitrate (PETN)

Nitrocellulose (NC)

Lead Styphnate (PbSty)

Tetrazene (TETR)

Cadmium (Cd)

Chromium (Cr)

Lead (Pb)

Mercury (Hg)

EPA

POTENTIAL HAZARDOUS WASTE SITE
PRELIMINARY ASSESSMENT
PART 1 - SITE INFORMATION AND ASSESSMENT

I IDENTIFICATION

01 STATE	02 SITE NUMBER

II SITE NAME AND LOCATION

01 SITE NAME (Legal, common, or descriptive name of site)	02 STREET, ROUTE NO. OR SPECIFIC LOCATION IDENTIFIER				
St Louis Ordnance Plant	4300 Goodfellow Blvd.				
03 CITY	**04 STATE**	**05 ZIP CODE**	**06 COUNTY**	**07 COUNTY CODE**	**08 CONG DIST**
St Louis	MO	63120	St Louis		
09 COORDINATES LATITUDE: 38°41' 18"N	LONGITUDE: 90° 16' 36" W				

10 DIRECTIONS TO SITE (Starting from nearest public road)

I-70 East through St Louis - Turn South on Goodfellow Blvd ½ miles on Goodfellow

III RESPONSIBLE PARTIES

01 OWNER (If known)	02 STREET (Business, mailing, residential)			
Department of Army				
03 CITY	**04 STATE**	**05 ZIP CODE**	**06 TELEPHONE NUMBER**	
Washington DC			( )	
07 OPERATOR (If known and different from owner)	**08 STREET** (Business, mailing, residential)			
Henry Bussey	4300 Goodfellow Blvd			
09 CITY	**10 STATE**	**11 ZIP CODE**	**12 TELEPHONE NUMBER**	
St Louis	MO	63120	(314) 679-6289	

13 TYPE OF OWNERSHIP (Check one)

☐ A PRIVATE ☒ B FEDERAL U.S. Army (Agency name) ☐ C STATE ☐ D COUNTY ☐ E MUNICIPAL

☐ F OTHER (Specify) ☐ G UNKNOWN

14 OWNER/OPERATOR NOTIFICATION ON FILE (Check all that apply)

☐ A RCRA 3001 DATE RECEIVED ___/___/___ (MONTH DAY YEAR) ☒ B UNCONTROLLED WASTE SITE (CERCLA 103 c) DATE RECEIVED 5/20/81 (MONTH DAY YEAR) ☐ C NONE

IV CHARACTERIZATION OF POTENTIAL HAZARD

01 ON SITE INSPECTION

☒ YES DATE 8/1/84 (MONTH DAY YEAR)
☐ NO

BY (Check all that apply)

☐ A EPA ☒ B EPA CONTRACTOR ☐ C STATE ☐ D OTHER CONTRACTOR
☐ E LOCAL HEALTH OFFICIAL ☐ F OTHER (Specify)

CONTRACTOR NAME(S) Ecology & Environment, Inc

02 SITE STATUS (Check one)

☐ A ACTIVE ☒ B INACTIVE ☐ C UNKNOWN

03 YEARS OF OPERATION

1942 (BEGINNING YEAR) | 1979 (ENDING YEAR) ☐ UNKNOWN

04 DESCRIPTION OF SUBSTANCES POSSIBLY PRESENT, KNOWN OR ALLEGED

Explosive residues and heavy metals

05 DESCRIPTION OF POTENTIAL HAZARD TO ENVIRONMENT AND/OR POPULATION

Potential hazards are explosion and direct contact

V PRIORITY ASSESSMENT

01 PRIORITY FOR INSPECTION (Check one. If high or medium is checked, complete Part 3 - Description of Hazardous Conditions and Incidents)

☐ A HIGH (Inspection required promptly) ☐ B MEDIUM (Inspection required) ☒ C LOW (Inspect on time available basis) ☐ D NONE (No further action needed, complete current disposition form)

VI INFORMATION AVAILABLE FROM

01 CONTACT	02 OF (Agency/Organization)		03 TELEPHONE NUMBER	
Dan Harrison	Environmental Cood Fort Leonard Wood		(314) 368-6108	
04 PERSON RESPONSIBLE FOR ASSESSMENT	**05 AGENCY**	**06 ORGANIZATION**	**07 TELEPHONE NUMBER**	**08 DATE**
Mark Mayo	E&E	FIT	(913) 432-9961	9/1/84 (MONTH DAY YEAR)

EPA

POTENTIAL HAZARDOUS WASTE SITE
PRELIMINARY ASSESSMENT
PART 2 WASTE INFORMATION

I IDENTIFICATION	
01 STATE	02 SITE NUMBER

II WASTE STATES QUANTITIES AND CHARACTERISTICS

01 PHYSICAL STATES (Check all that apply)

- [X] A SOLID
- [ ] B POWDER FINES
- [ ] C SLUDGE
- [ ] D OTHER _____ (Specify)
- [ ] E SLURRY
- [ ] F LIQUID
- [ ] G GAS

02 WASTE QUANTITY AT SITE (Measures of waste quantities must be independent)

TONS _____

CUBIC YARDS _____

NO OF DRUMS _____

03 WASTE CHARACTERISTICS (Check all that apply)

- [ ] A TOXIC
- [ ] B CORROSIVE
- [ ] C RADIOACTIVE
- [X] D PERSISTENT
- [ ] E SOLUBLE
- [ ] F INFECTIOUS
- [ ] G FLAMMABLE
- [ ] H IGNITABLE
- [ ] I HIGHLY VOLATILE
- [X] J EXPLOSIVE
- [ ] K REACTIVE
- [ ] L INCOMPATIBLE
- [ ] M NOT APPLICABLE

III WASTE TYPE

CATEGORY	SUBSTANCE NAME	01 GROSS AMOUNT	02 UNIT OF MEASURE	03 COMMENTS
SLU	SLUDGE			
OLW	OILY WASTE			
SOL	SOLVENTS		quantities	unknown
PSD	PESTICIDES			
OCC	OTHER ORGANIC CHEMICALS			
IOC	INORGANIC CHEMICALS			
ACD	ACIDS			
BAS	BASES			
MES	HEAVY METALS			

IV HAZARDOUS SUBSTANCES (See Appendix for most frequently cited CAS Numbers)

01 CATEGORY	02 SUBSTANCE NAME	03 CAS NUMBER	04 STORAGE/DISPOSAL METHOD	05 CONCENTRATION	06 MEASURE OF CONCENTRATION
OCC	2,4,6 - Trinitroresorcinol	82-73-5	hauled off site	unknown	
OCC	Cyclotrimethylene trinitramine	121-82-4	hauled off site	unknown	
OCC	2,4,6 Trinitrotoluene	118-96-7	hauled off site		
OCC	Nitrocellulose	PM9004-70-0	hauled off site		
OCC	Nitroglycerine	55-63-0	hauled off site		
OCC	Pentaerythrite Tetranitrate	78-11-5	hauled off site		
IOC	Lead Styphnate	15245-44-0	hauled off site		
OCC	Tetrazene	109-27-3	hauled off site		
MES	Cadmium	7940-43-9	hauled off site		
MES	Chromium	7440-47-3	hauled off site		
MES	Lead	7439-92-1	hauled off site		
MES	Mercury	7439-97-6	hauled off site		

V FEEDSTOCKS (See Appendix for CAS Numbers)

CATEGORY	01 FEEDSTOCK NAME	02 CAS NUMBER	CATEGORY	01 FEEDSTOCK NAME	02 CAS NUMBER
FDS	Silver azide		FDS		
FDS	Lead Nitrate		FDS		
FDS	Tetracene		FDS		
FDS	Sodium Azide		FDS		

VI SOURCES OF INFORMATION (Cite specific references, e.g. state files, sample analysis, reports)

See references in attached report

EPA FORM 2070-12 (7-81) p 2 of 4

EPA

POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT
PART 3 DESCRIPTION OF HAZARDOUS CONDITIONS AND INCIDENTS

I IDENTIFICATION	
01 STATE	02 SITE NUMBER

II HAZARDOUS CONDITIONS AND INCIDENTS

01 ☐ A GROUNDWATER CONTAMINATION — 02 ☐ OBSERVED (DATE _____) — ☐ POTENTIAL — ☐ ALLEGED
03 POPULATION POTENTIALLY AFFECTED _____ — 04 NARRATIVE DESCRIPTION

NA

01 ☐ B SURFACE WATER CONTAMINATION — 02 ☐ OBSERVED (DATE _____) — ☐ POTENTIAL — ☐ ALLEGED
03 POPULATION POTENTIALLY AFFECTED _____ — 04 NARRATIVE DESCRIPTION

Surface Runoff

01 ☐ C CONTAMINATION OF AIR — 02 ☐ OBSERVED (DATE _____) — ☐ POTENTIAL — ☐ ALLEGED
03 POPULATION POTENTIALLY AFFECTED _____ — 04 NARRATIVE DESCRIPTION

NA

01 ☒ D FIRE/EXPLOSIVE CONDITIONS — 02 ☐ OBSERVED (DATE _____) — ☒ POTENTIAL — ☐ ALLEGED
03 POPULATION POTENTIALLY AFFECTED 100 — 04 NARRATIVE DESCRIPTION

Explosive residues are contained in Building located in Hanley area

01 ☒ E DIRECT CONTACT — 02 ☐ OBSERVED (DATE _____) — ☒ POTENTIAL — ☐ ALLEGED
03 POPULATION POTENTIALLY AFFECTED _____ — 04 NARRATIVE DESCRIPTION

Contact could occur if people enter restricted Hanley area

01 ☒ F CONTAMINATION OF SOIL — 02 ☐ OBSERVED (DATE _____) — ☒ POTENTIAL — ☐ ALLEGED
03 AREA POTENTIALLY AFFECTED 16 (Acres) — 04 NARRATIVE DESCRIPTION

Possible contamination of soil with explosive residues and heavy metals

01 ☐ G DRINKING WATER CONTAMINATION — 02 ☐ OBSERVED (DATE _____) — ☐ POTENTIAL — ☐ ALLEGED
03 POPULATION POTENTIALLY AFFECTED _____ — 04 NARRATIVE DESCRIPTION

NA

01 ☐ H WORKER EXPOSURE/INJURY — 02 ☐ OBSERVED (DATE _____) — ☐ POTENTIAL — ☐ ALLEGED
03 WORKERS POTENTIALLY AFFECTED _____ — 04 NARRATIVE DESCRIPTION

NA

01 ☐ I POPULATION EXPOSURE/INJURY — 02 ☐ OBSERVED (DATE _____) — ☐ POTENTIAL — ☐ ALLEGED
03 POPULATION POTENTIALLY AFFECTED _____ — 04 NARRATIVE DESCRIPTION

NA

EPA FORM 2070-13 (7-81)

EPA

POTENTIAL HAZARDOUS WASTE SITE
PRELIMINARY ASSESSMENT
PART 3 - DESCRIPTION OF HAZARDOUS CONDITIONS AND INCIDENTS

I IDENTIFICATION
01 STATE | 02 SITE NUMBER

II HAZARDOUS CONDITIONS AND INCIDENTS

01 ☐ J DAMAGE TO FLORA
04 NARRATIVE DESCRIPTION
02 ☐ OBSERVED (DATE _____) ☐ POTENTIAL ☐ ALLEGED

NA

01 ☐ K DAMAGE TO FAUNA
04 NARRATIVE DESCRIPTION
02 ☐ OBSERVED (DATE _____) ☐ POTENTIAL ☐ ALLEGED

NA

01 ☐ L CONTAMINATION OF FOOD CHAIN
04 NARRATIVE DESCRIPTION
02 ☐ OBSERVED (DATE _____) ☐ POTENTIAL ☐ ALLEGED

NA

01 ☐ M UNSTABLE CONTAINMENT OF WASTES
03 POPULATION POTENTIALLY AFFECTED _____
02 ☐ OBSERVED (DATE _____) ☐ POTENTIAL ☐ ALLEGED
04 NARRATIVE DESCRIPTION

NA

01 ☐ N DAMAGE TO OFFSITE PROPERTY
04 NARRATIVE DESCRIPTION
02 ☐ OBSERVED (DATE _____) ☐ POTENTIAL ☐ ALLEGED

NA

01 ☒ O CONTAMINATION OF SEWERS STORM DRAINS WWTPs
04 NARRATIVE DESCRIPTION
02 ☐ OBSERVED (DATE _____) ☐ POTENTIAL ☐ ALLEGED

Sewer are contaminated with explosive residues and heavy metals

01 ☐ P ILLEGAL/UNAUTHORIZED DUMPING
04 NARRATIVE DESCRIPTION
02 ☐ OBSERVED (DATE _____) ☐ POTENTIAL ☐ ALLEGED

NA

05 DESCRIPTION OF ANY OTHER KNOWN POTENTIAL OR ALLEGED HAZARDS

NA

III TOTAL POPULATION POTENTIALLY AFFECTED: 100

IV COMMENTS

V SOURCES OF INFORMATION

See references in attached reports

EPA FORM 2070-12 (7-81) P 4 of 4